

G 1347

(Pages : 2)

Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2016

Seventh Semester

Branch : Electronics and Communication Engineering

EC 010 705—EMBEDDED SYSTEMS (EC)

(New Scheme—2010 Admission onwards)

[Improvement/Supplementary]

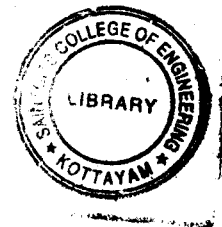
Time : Three Hours

Maximum : 100 Marks

Part A

*Answer all questions.
Each question carries 3 marks.*

1. List four requirements of an embedded system.
2. What are preprocessor directives ? Give two examples.
3. Define synchronous communication. Give an example.
4. What is the role of real time clock ?
5. Define process.



(5 × 3 = 15 marks)

Part B

*Answer all questions.
Each question carries 5 marks.*

6. Discuss embedded system and discuss the classification of embedded systems.
7. Compare and contrast assembly language and high ?
8. Write short notes on UART.
9. Explain ADC interfacing.
10. Write notes on tasks and task states.

(5 × 5 = 25 marks)

Part C

*Answer all questions.
Each full question carries 12 marks.*

11. Explain the application of Embedded systems in consumer Electronics.

Or

Turn over

12. Write notes on the application of Embedded systems in the following :—
- (a) Control system. (6 marks)
 - (b) Handheld computers. (6 marks)
13. Explain the hardware architecture of an Embedded system.
- Or*
14. Write notes on Embedded C compiler and interfacing programs using C language.
15. Write notes on the following :—
- (a) PC to PC communication. (6 marks)
 - (b) HDLC. (6 marks)
- Or*
16. Describe an embedded application over mobile network with the required source code listing.
17. Explain matrix keyboard interfacing with a neat block diagram and required source code in C.
- Or*
18. Explain interfacing with displays with illustrative diagram and source code in C.
19. Write notes on the following :—
- (a) Process management. (6 marks)
 - (b) Memory management. (6 marks)
- Or*
20. Explain the use of queues pipes and mailboxes during the message communication among processes.
[5 × 12 = 60 marks]

